

REMARKS

Claims 1-23 are pending. Claims 4, 9 and 14 have been amended. Claims 16-23 are new. No new matter has been added.

Claim Rejections Under 35 U.S.C. §102

Claims 1-3, 5-8, 10-13 and 15 stand rejected under 35 U.S.C. §102(b) as being anticipated by Beakes (US 6,131,182). Applicants respectfully traverse.

Independent claim 1 recites the following limitations:

determining at least a plurality of slews of output timing events for a plurality of input timing events based on a timing model of a gate; and

selecting a worst-case input timing event from the plurality of input timing events based on at least the slews of the output timing events.

Applicants respectfully submit that Beakes does not disclose such limitations.

In response to the Examiner's finding of the Applicants' arguments non-persuasive, Applicants assert that Beakes discloses that the delay of a gate depends only on the pattern of inputs, and a worst-case delay path is only identified by generating input patterns to achieve the worst-case performance. In fact, Beakes teaches away from what is claimed by the Applicants by specifically asserting that the actual delay of the macro is only determined using the resulting input pattern. *See Beakes, col. 14, lines 9-42.* This teaching by Beakes is clearly different than what is claimed by the Applicants.

Beakes specifically fails to disclose or even suggest selecting a worst-case input timing event based on the slews of the output timing events. Slews of the output timing events include slew rates of the output timing events. In general, the slew rate is determined by the amount of time for a waveform to transition from a first voltage level to a second voltage level. Beakes is not concerned with the slew or even the slew rate. In col. 14, lines 34-35, Beakes specifically asserts that the delay is estimated with the input pattern. In general, 'slew' or 'slew rate' is the change in voltage per change in time, and 'delay' is only the change in time.

In contrast to Beakes, independent claim 1 recites determining slews of output timing events and selecting a worst-case input timing event based on the slews of the output timing events.

Beakes does not disclose these limitations of the present claim. Instead, as noted above, Beakes explicitly teaches that a worst-case delay path is only identified by generating input patterns to achieve the worst-case performance. There is no teaching or suggestion in Beakes that slews are used in any manner to determine a worst-case delay path.

For at least these reasons, it is respectfully submitted that independent claim 1 is not anticipated by the cited Beakes reference.

For at least these same reasons, it is respectfully submitted that independent claims 6 and 11 are likewise not anticipated by the cited Beakes reference.

Since claims 2-5, 7-10, and 12-15 depend from independent claims 1, 6, and 11, respectively, these dependent claims are also not anticipated and are therefore allowable over the cited Beakes reference.

Claims 16-23 are new and claim patentable subject matter not anticipated by the cited Beakes reference.

Claim Rejections Under 35 U.S.C. §103

Claims 4, 9 and 14 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Beakes in view of Jess (US 2004/0002844). Applicants respectfully traverse.

The ancillary Jess reference does not remedy the deficiencies of Beakes. For example, the Action concedes that Jess does not disclose the same formula recited in present claim 4, but the Action purports that Jess considers input slew and output slew. However, Jess fails to disclose or suggest the means for applying input and output slew to the teachings of Beakes to achieve the claimed features of the present claims. Accordingly, Applicant respectfully asserts that any combination of these cited references is merely based on the Applicant's disclosure and is thus improper.

In any case, since claims 4, 9 and 14 depend from independent claims 1, 6, and 11, respectively, these dependent claims are not anticipated by the cited references and are therefore allowable over the cited references.

Conclusion

Based on the foregoing, all claims are believed allowable, and an allowance of the claims is respectfully requested. If the Examiner has any questions or comments, the Examiner is respectfully requested to contact the undersigned at the number listed below.

The Commissioner is authorized to charge any fees due in connection with the filing of this document to Bingham McCutchen's Deposit Account No. 50-2518, referencing billing number **7017522001**. The Commissioner is authorized to credit any overpayment or to charge any underpayment to Bingham McCutchen's Deposit Account No. 50-2518, referencing billing number **7017522001**.

Respectfully submitted,
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